

Part I: Non-Motor Aspects of Experiences of Daily Living (nM-EDL)

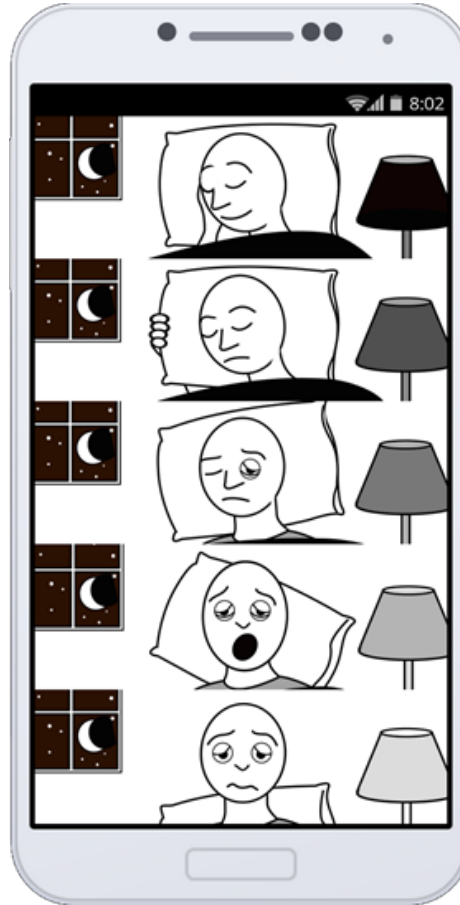
1.7 SLEEP PROBLEMS

Over the past week, have you had trouble going to sleep at night or staying asleep through the night? Consider how rested you felt after waking up in the morning.

- 0: Normal: No problems.
- 1: Slight: Sleep problems are present but usually do not cause trouble getting a full night of sleep.
- 2: Mild: Sleep problems usually cause some difficulties getting a full night of sleep.
- 3: Moderate: Sleep problems cause a lot of difficulties getting a full night of sleep, but I still usually sleep for more than half the night.
- 4: Severe: I usually do not sleep for most of the night.

SCORE

NIH R21: “Visual Parkinson’s Disease Rating Scale:
A Universal Iconic Questionnaire for Epidemiological Studies in India”



















VPDRS

Screen1 ▾ Add Screen ... Remove Screen

Palette

User Interface

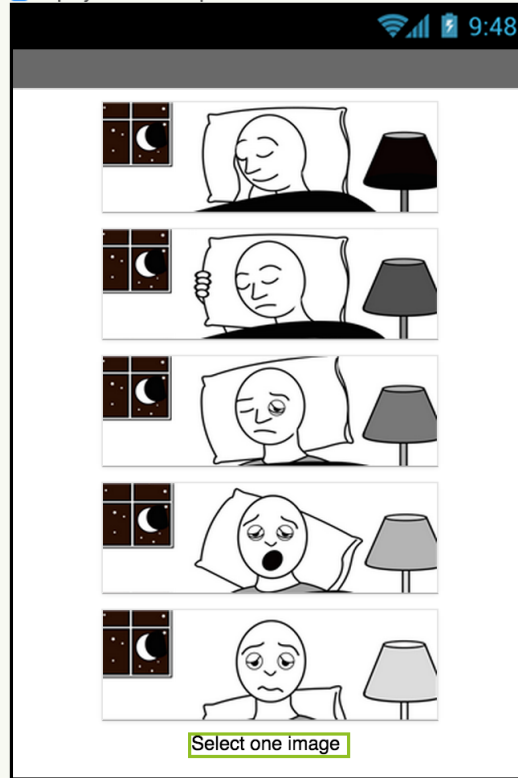
-  Button ?
-  CheckBox ?
-  DatePicker ?
-  Image ?
-  Label ?
-  ListPicker ?
-  ListView ?
-  Notifier ?
-  PasswordTextBox ?
-  Slider ?
-  Spinner ?
-  TextBox ?
-  TimePicker ?
-  WebView ?

Layout

Media









Viewer

Display hidden components in Viewer



Non-visible components

Components

-  Screen1
 -  Button1
 -  Button2
 -  Button3
 -  Button4
 -  Button5
 -  Label1
 -  TinyWebDB1

Rename

Delete



VPDRS

Screen1 ▾ Add Screen ... Remove Screen

Designer Blo

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - Button1
 - Button2
 - Button3
 - Button4
 - Button5
 - Label1
 - TinyWebDB1
- Any component

Viewer

```

initialize global Responses to create empty list

when Button1 .TouchUp
do
  add items to list list get global Responses
  item 1
  set Label1 . Text to get global Responses
  call TinyWebDB1 .StoreValue
  tag "VPDRS"
  valueToStore get global Responses

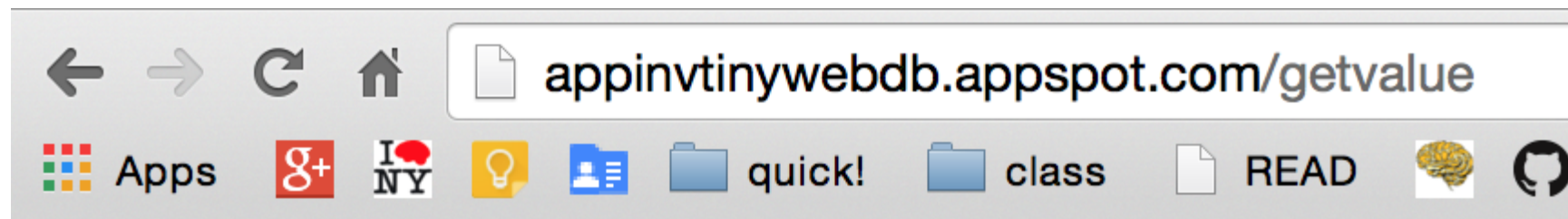
when Button2 .TouchUp
do
  add items to list list get global Responses
  item 2
  set Label1 . Text to get global Responses
  call TinyWebDB1 .StoreValue
  tag "VPDRS"
  valueToStore get global Responses

when Button3 .TouchUp
do
  add items to list list get global Responses

when Button4 .TouchUp
do
  add items to list list get global Responses
  item 4
  set Label1 . Text to get global Responses
  call TinyWebDB1 .StoreValue
  tag "VPDRS"
  valueToStore get global Responses

when Button5 .TouchUp
do
  add items to list list get global Responses
  item 5
  set Label1 . Text to get global Responses
  call TinyWebDB1 .StoreValue
  tag "VPDRS"
  valueToStore get global Responses

set Button1 . Image to cartoon_VPDRS1
  
```



The server will send this to the component:

`["VALUE", "VPDRS", "[2,4,5]"]`

[Return to TinyWebDB Main Page](#)

ODK Collect 1.4.5 (1048)

Data collection made easier...

Fill Blank Form

Edit Saved Form

Send Finalized Form

Get Blank Form

Delete Saved Form

- Birds**
ID: Birds
- Cascading Select Form**
Version: 2012072302 ID: CascadingSelect
- Cascading Triple Select Form**
Version: 2012072301 ID: CascadingTripleSelect
- Forest Plot Survey**
ID: Forest_1
- Geo Tagger v2**
ID: geo_tagger_v2
- Hypertension Screening**
ID: hypertension
- Miramare**
ID: Miramare
- New Widgets**
ID: NewWidgets



observation (1)

What bird did you see?



Some birds have included audio or video

Golden eagle



Kingfisher



Rock pigeon



European nuthatch



European robin



Great tit



Form Birds Filter none

Visualize Enketo Webform Export Publish

Save Save As Delete

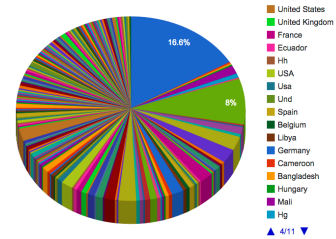
Submissions per page 1000

Filters Applied Add Filter

Display Metadata

Previous Birds Next

uid	Date	Time	Accepted	Time	Author	Country	Count	Priority	View
uid:4f59e379-3dba-4ad7-ac19-60b8afae283	Tue Apr 21	17:59:29 UTC 2015	true	Tue Apr 21	Sam	Namibia	52	low	View
uid:1c14cc8e-1f1e-4792-af6d-1ae63baaca42	Tue Apr 21	18:30:23 UTC 2015	true	Tue Apr 21	sam	namibia	89	med	View
uid:6afafba0-a39f-4e6d-96a8-a090e2287a62	Tue Apr 21	18:38:55 UTC 2015	true	Tue Apr 21	Cert Semillas	Chile			View
uid:99520379-04f5-4a65-8eb7-6cec01f24e58	Wed Apr 22	01:37:54 UTC 2015	true	Wed Apr 22	Andi	Din	28	med low	View
uid:3f5bb516-b7a1-4322-9ede-6cb8704697d2	Wed Apr 22	03:17:39 UTC 2015	true	Wed Apr 22				low	View
uid:901f022d-d3e9-4e1f-a9bc-f8f80869888c	Wed Apr 22	09:23:25 UTC 2015	true	Wed Apr 22	Alex	Kenya	25	med med	View
uid:d8c3bd7b-4bbe-40af-955b-741ffd3da36	Wed Apr 22	12:42:58 UTC 2015	true	Wed Apr 22	Giti	Tkgkgi	54	med med	View
uid:0fea1ff1-656c-428c-b7ed-2e4b0ad73789	Wed Apr 22	16:27:11 UTC 2015	true	Wed Apr 22					View
uid:4633efac-24a8-4d3b-bf29-d50e95042b53	Wed Apr 22	16:45:08 UTC 2015	true	Wed Apr 22	Turikumwe				View
uid:44af7057-9e53-4729-a639-b3314e6607d1	Thu Apr 23	14:24:59 UTC 2015	true	Thu Apr 23	Sam				View
uid:3fe47d8-3b6c-4caf-836f-e9aa9767ef68	Thu Apr 23	14:25:21 UTC 2015	true	Thu Apr 23	Sam	Namib	44	low high	View
uid:8f8b7e1f-23d7-4db7-8eab-61b36a0d1e97	Fri Apr 24	00:05:10 UTC 2015	true	Fri Apr 24	Carlos	Monclova	35	med low	View
uid:45b0bd61-02b1-4914-b900-37bb5b7e8a23	Fri Apr 24	12:57:37 UTC 2015	true	Fri Apr 24	Andy	RDC		med med	View
uid:7d1f23d5-9eec-4012-9443-76f381cf3c83	Fri Apr 24	18:45:03 UTC 2015	true	Fri Apr 24	eder	mexici	20	low low	View
uid:56e84810-5fff-4e94-87b6-a2cd349fe882	Fri Apr 24	20:54:13 UTC 2015	true	Fri Apr 24	Arno Klein	USA	60	high med	View



- United States
 - United Kingdom
 - France
 - Ecuador
 - HR
 - USA
 - USA
 - USA
 - Spain
 - Belgium
 - Libya
 - Germany
 - Cameroon
 - Bangladesh
 - Hungary
 - Mali
 - Hg
- ▲ 4/11 ▼

Big Data to Knowledge (BD2K) Advancing Biomedical Science
Using Crowdsourcing and Interactive Digital Media (UH2)

(1)QA/editing of mPower voice data

Max Little



PARKINSON'S^{UK}
CHANGE ATTITUDES.
FIND A CURE.
JOIN US.

- http://www.ted.com/talks/max_little_a_test_for_parkinson_s_with_a_phone_call.html
- Parkinson's Voice Initiative (PVI) has collected over 12,000 audio samples over a standard telephone line and developed a cheap and simple tool to detect Parkinson's disease with 99% accuracy.

patientslikeme



PVI

Parkinson's Voice
Initiative

Results

	mean WMAE	sd WMAE	train.rank	test.WMAE	test.rank
random_forest___FullPDRS~Covs	8.193980	0.5749795	7	8.013441	1
knn___FullPDRS~Covs	8.075521	0.5959760	4	8.038318	2
boosted_regr_trees___FullPDRS~Covs	7.908658	0.5873613	3	8.039886	3
random_forest___FullPDRS~Voice+Covs	7.835783	0.5455000	2	8.202845	4
ridge___FullPDRS~Covs	8.487461	0.5668257	17	8.306173	5
lasso___FullPDRS~Covs	8.462333	0.5689799	15	8.309387	6
enet___FullPDRS~Covs	8.460393	0.5748202	14	8.315277	7
lin_regr___FullPDRS~Covs	8.442973	0.5748839	13	8.315860	8
step_regr___FullPDRS~Covs	8.484009	0.5841078	16	8.355877	9
boosted_regr_trees___FullPDRS~Voice+Covs	7.729247	0.6155224	1	8.390096	10



only 2 out of the 10 top models used voice features.



Lessons and Future Directions

1. Voice data quality is, as expected, worse than data acquired in the lab.
 - Capture audio on the device itself?
 - Real-time voice analysis to prompt for a better recording?
 - Increase sample size (more data)?
2. Quality assessment needs to be much more rigorous.
 - Domain expert editing?
 - Distributed minimally trained non-expert editing?
 - Automated approaches, semi-supervised learning?
 - Challenge approach
3. Recordings in the wild should be accompanied by comparative data:
 - Laboratory recordings
 - Passive speech
 - Healthy controls
 - Better instructions given to participants

Big Data to Knowledge (BD2K) Advancing Biomedical Science
Using Crowdsourcing and Interactive Digital Media (UH2)

(2) Turning BigBrain segmentation
into a computer game

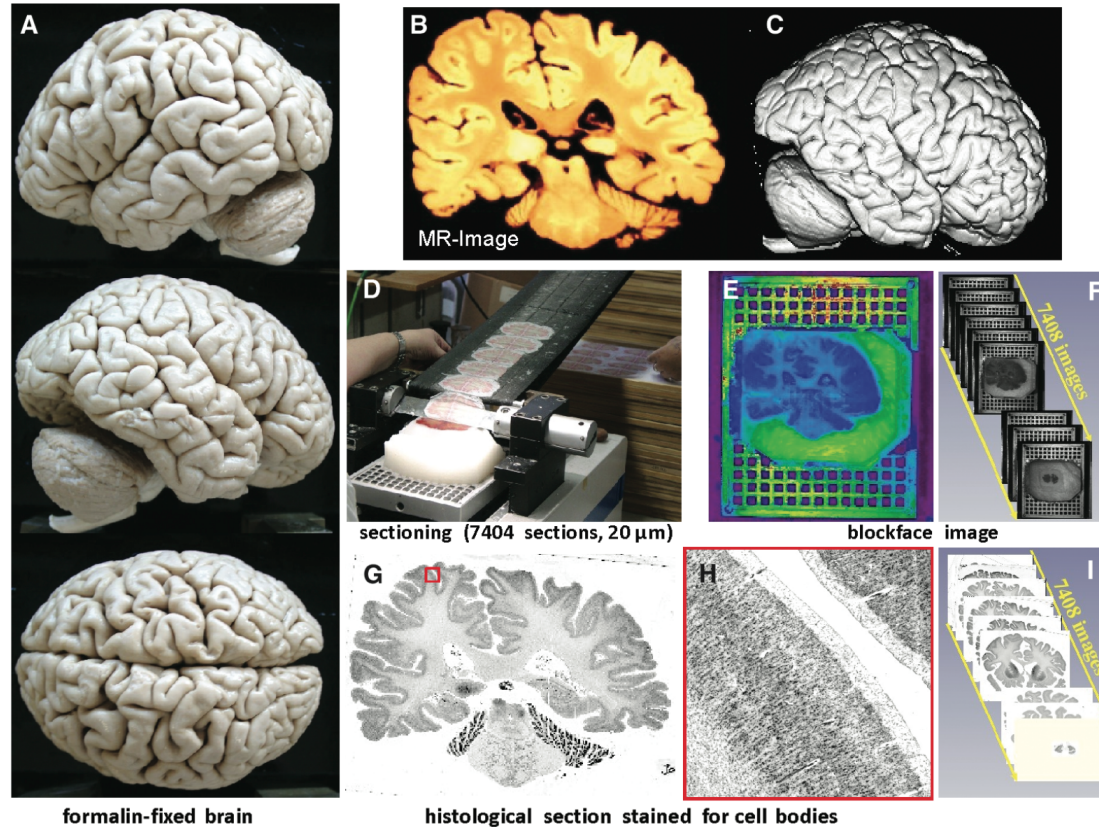


Fig. 1. Illustration of tissue and image processing. (A) Photographs of the fixed brain. Lateral left (top), lateral right (middle), and dorsal (bottom) views. (B) Magnetic resonance image (coronal view) and (C) 3D-reconstructed MRI volume of the fixed brain. (D) Histological sectioning. (E) Blockface image of a section (pseudocolored) resting on the mounting grid that served for alignment of the blockface images. (F) Series of blockface images. (G) Cell body–stained histological sections with the region of interest denoted by a red box. This area is shown with higher magnification in (H). (I) Series of histological images, which were 3D-reconstructed using the blockface images (F) and the MRI (C).

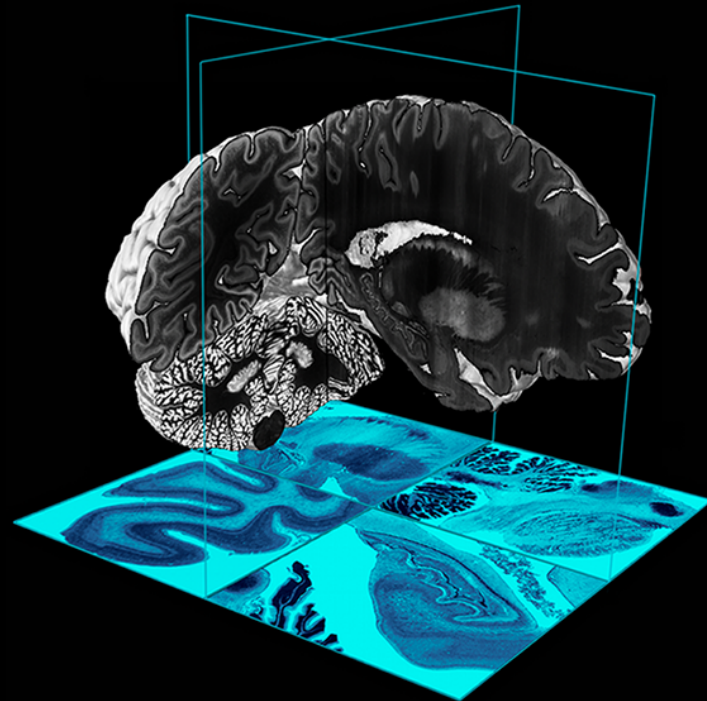
Username:
Password:

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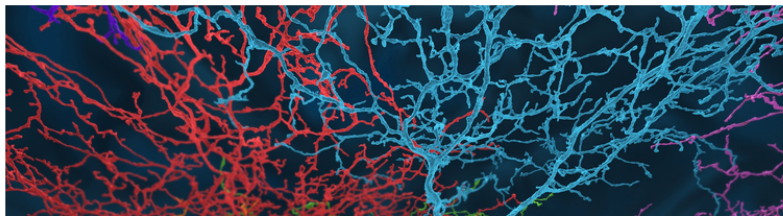
[Watch the BigBrain video](#)



About EyeWire, A Game to Map the Brain



EyeWire is a game to map the brain in collab with Seung Lab at Princeton. Anyone can play and you need no scientific background — over 160,000 people from 145 countries already do. Together we are mapping the 3D structure of neurons; advancing our quest to understand ourselves.



English

한국어

Get the latest from EyeWire:

Subscribe

Why EyeWire?

Solving the mysteries of the brain requires something more powerful than a supercomputer - YOU. Together, we're mapping neural circuits to decipher the mysteries of vision.

EyeWire is a game to map the brain from Sebastian Seung's Computational Neuroscience Lab at Princeton. Over 150,000 people from 145 countries play.

Competition Schedule: Meme Teams, every other Thurs. Happy Hour Every Friday 2-4 pm US ET.

Shop EyeWire Gear



140

Tweet

submit

reddit

605

Like

48

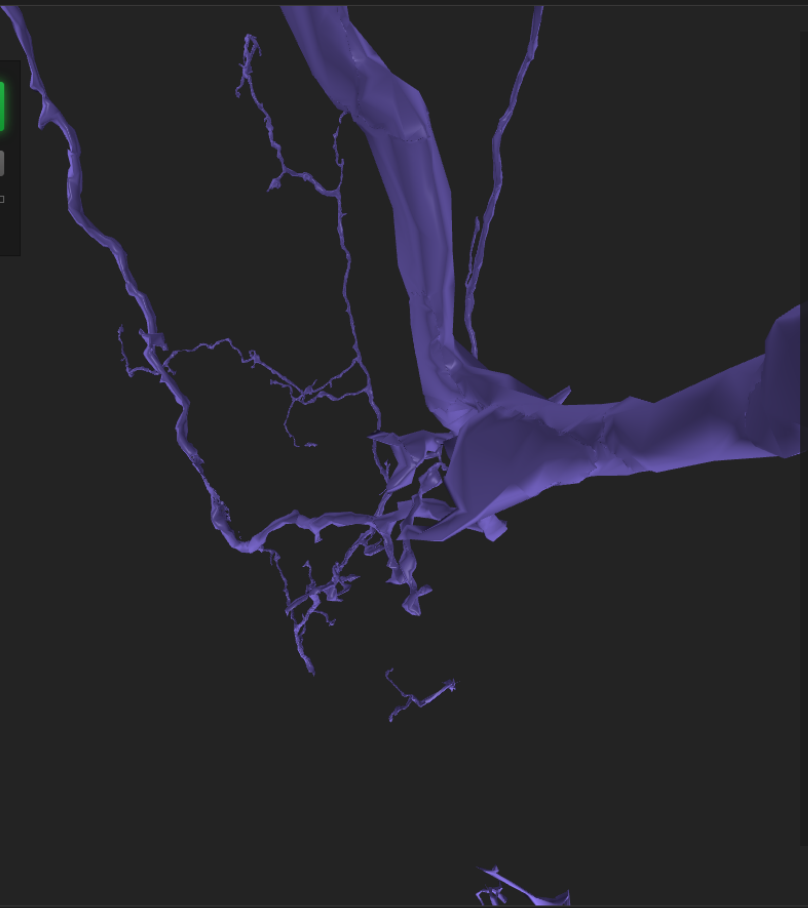
+1

Overview

Start Playing

Mystery #197b

Countdown to Neuropia



Astonishing Eyewirers

today week month

rank	username	points
1	nj4876	24926
2	0303sb	22629
3	seo646	16462
4	freesong	13146
5	ronin	11667
6	scoobl	11512
7	reb1618	11457
8	Nseraf	11120
9	twister2	10964
10	susi	7812
11	MaraTara	5347
12	mam711	5223
13	djajsl1234	4992
14	Mannl_Mammut	4184
15	cattrack	4057
16	m7md	3922
17	notenbed	3773
18	Forager19	3399
19	LotteryDiscountz	3049
20	webnajma	2873
21	aesanta1	2873

0303sb trailblazed a cube!

>